

What is claimed is:

- 1                   1.     An electric motor comprising:
  - 2                   a housing having first and second ends;
  - 3                   a rotatable shaft extending through the housing;
  - 4                   a commutator disposed in the housing about the shaft;
  - 5                   a plurality of brushes disposed in the housing and engagable with the
  - 6 commutator ;
  - 7                   a bushing mounted in the housing in engagement with the shaft; and
  - 8                   a lubricant recirculation member disposed in the housing about the
  - 9 shaft between the commutator and the bushing, the lubricant recirculation member in
  - 10 the form of a body having a unitarily joined first lubricant recirculation and wear
  - 11 surface portion and a second vibration dampening portion.
- 1                   2.     The motor of claim 1 wherein:
  - 2                   the first portion has an internal cavity with a side wall shaped to
  - 3 recirculate lubricant away from the commutator.
- 1                   3.     The motor of claim 1 wherein:
  - 2                   the first and second portions have complementary, mating members
  - 3 for mechanical interlock of the first and second portions.
- 1                   4.     The motor of claim 1 wherein:
  - 2                   the second portion of the body fixedly engages the motor shaft.
- 1                   5.     The motor of claim 4 wherein:
  - 2                   the second portion is formed of a thermoplastic elastomer.
- 1                   6.     The motor of claim 5 wherein:
  - 2                   the thermoplastic elastomer is a polyether ester copolymer.

1                   7.     The motor of claim 1 further comprising:  
2                   complementary peripheral interlock members formed on the first and  
3                   second portions.

1                   8.     The motor of claim 7 wherein:  
2                   the complementary interlock members include annular radially inward  
3                   and radially outward complementary members on the first and second portions.

1                   9.     The motor of claim 1 further comprising:  
2                   a plurality of circumferentially spaced fingers extending from the first  
3                   portion into a central bore in the second portion, a radially innermost surface of each  
4                   of the plurality of fingers engaging the shaft of the motor to center the lubricant  
5                   recirculation member about the shaft.

1                   10.    The motor of claim 1 wherein:  
2                   the first portion of the body of the lubricant recirculation member is  
3                   formed of molybdenum disulfide filled nylon 6, 6.

1                   11.    The motor of claim 1 wherein the first portion of the body  
2                   further comprises:  
3                   a base having a wear surface contacting the bushing; and  
4                   non-linear sidewalls extending away from the base to direct lubricant  
5                   from the bushing away from the base.